BookletChart™

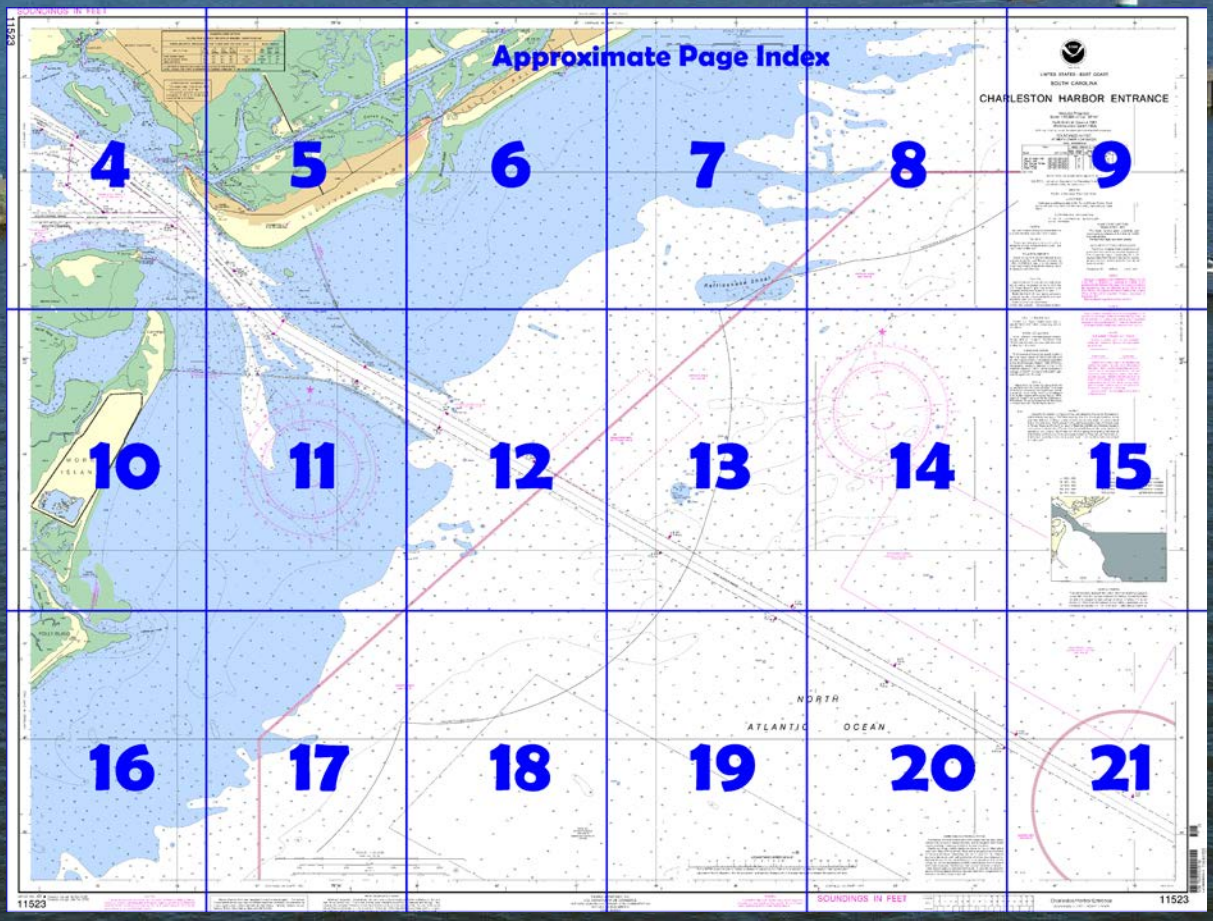
Charleston Harbor Entrance

NOAA Chart 11523

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- *Complete, reduced-scale nautical chart*
- *Print at home for free*
- *Convenient size*
- *Up-to-date with Notices to Mariners*
- *Compiled by NOAA's Office of Coast Survey, the nation's chartmaker*



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

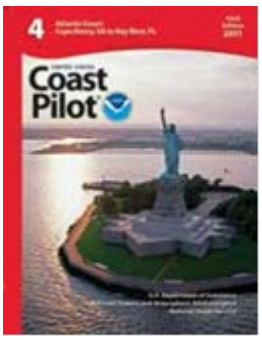
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=11523



(Selected Excerpts from Coast Pilot)
Charleston Harbor is the approach to Charleston and the Cooper, Wando and Ashley Rivers. The harbor is easy of access day or night in clear weather, and is one of the best harbors of refuge on the South Atlantic coast.
The areas to the east and southeast of Charleston Harbor are used by the U.S. Navy to conduct training exercises.
The entrance to Charleston Harbor is between converging jetties that extend 3 miles seaward. **Fort Moultrie** and the town of **Sullivans Island** are on the north side of the entrance; **Fort Sumter** is on the southwest side.

Charleston Light (32°45'30"N., 79°50'36"W.) 163 feet above water, is shown from a triangular tower, upper half black, lower half white, on Sullivans Island.
Not infrequently, portions of Charleston Harbor are affected by poor visibility during squalls of heavy rain, rare snow squalls, and fog. Fog associated with a generalized weather pattern occasionally settles over the entire port area including the fairways offshore. Fog over only a part of the harbor is a frequent occurrence..
Caution.–The areas generally to the east and southeast of Charleston Harbor are used extensively by the U.S. Navy and other military services to conduct various types of surface, subsurface, and aircraft training exercises. Fleet Area Control and Surveillance Facility (FACSFAC), Jacksonville, FL, exercises cognizance of the operating areas, makes area assignments, ensures promulgation of firing notices, issues schedules, and prescribes necessary additional regulations.
The entrance to Charleston Harbor is between converging jetties. The north jetty is almost completely submerged at MHW. There are no lights on the jetties and smaller craft approaching from the north close to shore at MHW should exercise extreme caution not to confuse the south jetty for the north jetty. It is recommended all vessels align seaward of Lighted Buoy 18 before final approach to the jetty entrance.
Dangers.–The danger area of a former World War II minefield is off the entrance to Charleston Harbor. The area is open to unrestricted surface navigation but all vessels are cautioned not to anchor, dredge, trawl, lay cables, bottom, or conduct any similar type of operation because of residual danger from mines on the bottom. An **"anchor at your own risk"** anchorage, within the danger area, is on the north side of the entrance channel about 7 miles NW of Charleston Entrance Lighted Whistle Buoy C. The rectangular anchorage is enclosed by the following points:

32°42.9'N., 79°42.8'W.;
32°41.3'N., 79°39.3'W.;
32°39.9'N., 79°40.2'W.; and
32°41.6'N., 79°43.7'W.

The area has been searched on many occasions and no unexploded ordnance has been discovered. Vessels have routinely anchored in this offshore anchorage for many years without mishap.
A regulated navigation area extends northeastward and southeastward along the northern side of the entrance channel from Charleston Entrance Channel Lighted Buoy 16. (See **165.714**, chapter 2, for limits and regulations.)
Currents.–Off the entrance to Charleston Harbor the tidal currents are rotary with velocities of about 1 knot. Near the entrance to the jetties the current sets fair with the channel at strengths of flood and ebb and can be expected to set across the channel with a velocity of about 0.2 knot about 3 hours after strength of flood and ebb, setting northeastward and southwestward, respectively.
Pilotage, Charleston.–Pilotage is compulsory for all foreign vessels and for all U.S. vessels under register in the foreign trade.
Quarantine, customs, immigration, and agricultural quarantine.–(See chapter 3, Vessel Arrival Inspections, and Appendix A for addresses.)
Restricted areas are in the northern portion of Shipyard Creek, and in the Cooper River at the U.S. Government facility.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Miami	Commander 7th CG District Miami, FL	(305) 415-6800

Table of Selected Chart Notes

Corrected through NM Oct. 23/10
Corrected through LNM Oct. 12/10

HEIGHTS

Heights in feet above Mean High Water.

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

INTRACOASTAL WATERWAY

The project depth from Winyah Bay to Charleston, S.C. is 12 feet.
The controlling depths are published periodically in the U.S. Coast Guard Local Notice to Mariners.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE C

Hydrography from the bridge at Breach Inlet to the Intracoastal Waterway; in Conch Creek, Inlet Creek, Swinton Creek, and Hamlin Creek; is reported from private surveys of 2007.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.634" northward and 0.690" eastward to agree with this chart.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Charleston, SC KHB-29 162.55 MHz

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

For Symbols and Abbreviations see Chart No. 1

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

ACKNOWLEDGMENT

The National Ocean Service acknowledges the exceptional cooperation received from members of the Golden Corner Lakes Squadron, District 26, United States Power Squadrons for continually providing essential information for revising this chart.

NOTE B

DANGER AREA

Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any similar type of operation because of residual danger from mines on the bottom.
Anchorage in the designated area is at your own risk.

HURRICANES AND TROPICAL STORMS

Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations.

Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved.

Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, and U.S. Coast Guard.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: ———

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Isle of Palms Pier	(32°47'N/79°47'W)	5.5	5.1	0.2
Breach Inlet	(32°47'N/79°49'W)	5.5	5.1	0.2
Ben Sawyer Bridge	(32°46'N/79°50'W)	5.6	5.2	0.2
Fort Sumter	(32°45'N/79°53'W)	5.6	5.3	0.2
Shem Creek	(32°48'N/79°53'W)	5.7	5.4	0.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Sep 2010)

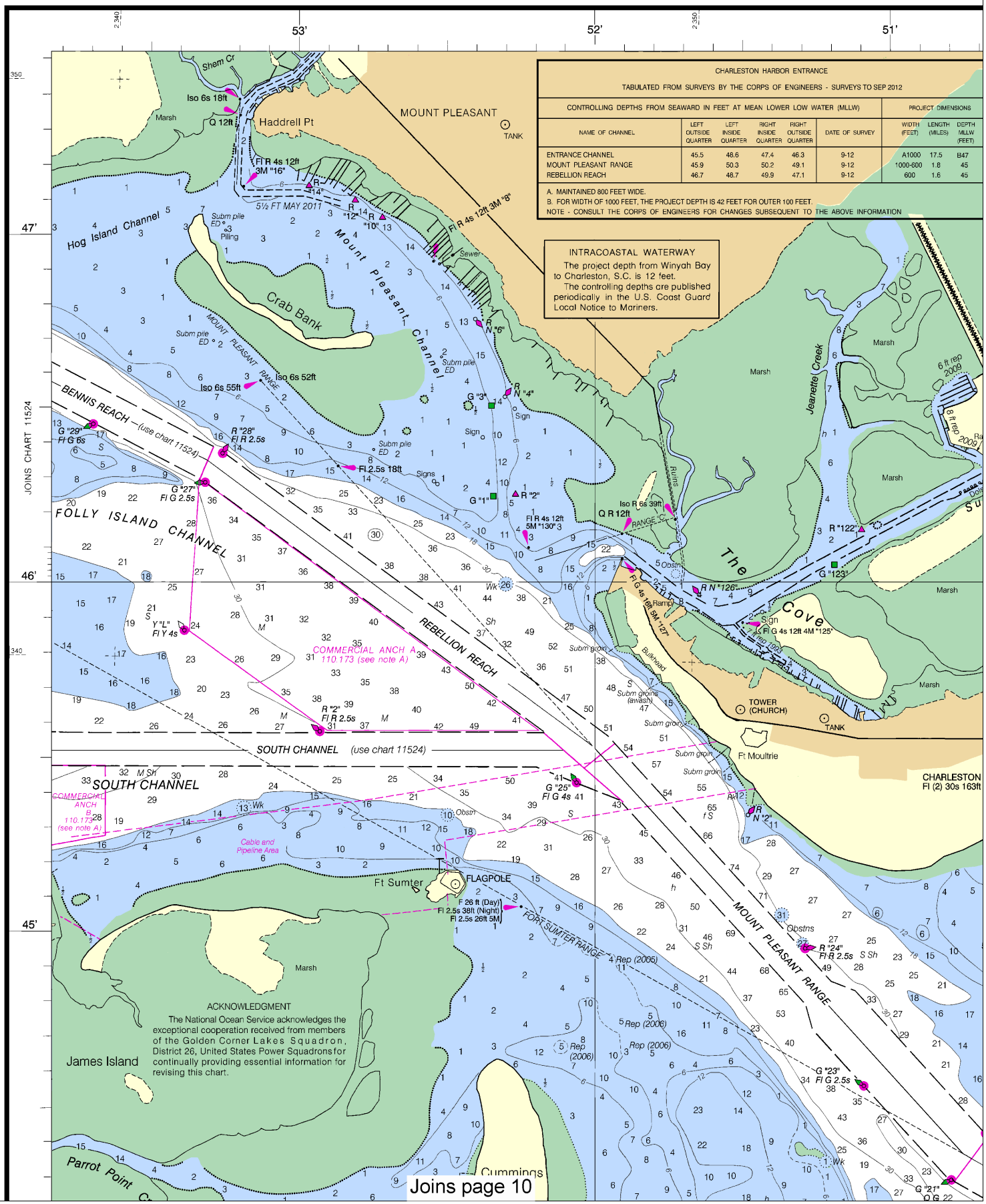
CHARLESTON HARBOR ENTRANCE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO SEP 2012

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL	45.5	48.6	47.4	46.3	9-12	A1000	17.5	B47
MOUNT PLEASANT RANGE	45.9	50.3	50.2	49.1	9-12	1000-600	1.8	45
REBELLION REACH	46.7	48.7	49.9	47.1	9-12	600	1.6	45

A. MAINTAINED 800 FEET WIDE.
B. FOR WIDTH OF 1000 FEET, THE PROJECT DEPTH IS 42 FEET FOR OUTER 100 FEET.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

SOUNDINGS IN FEET

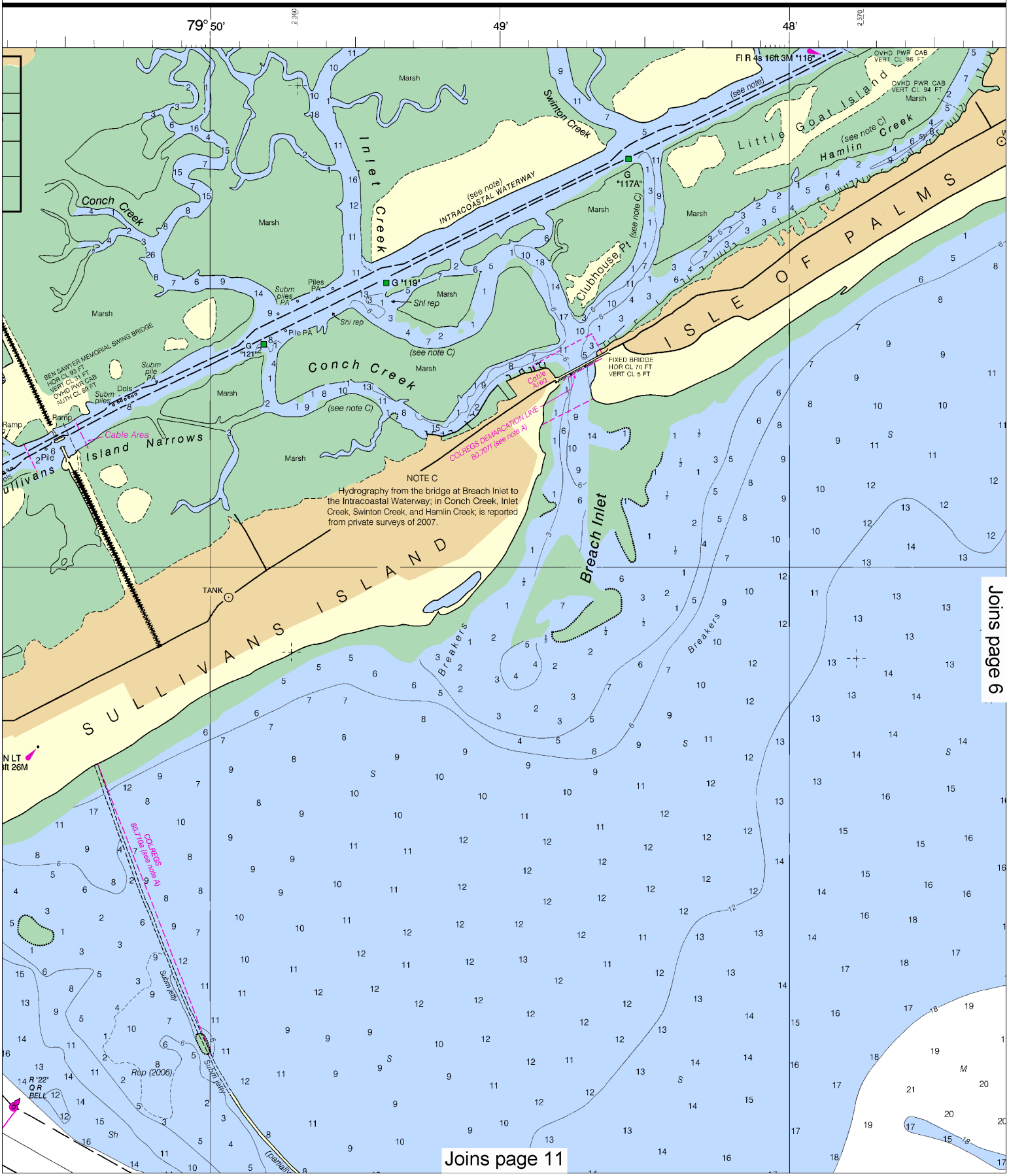


Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

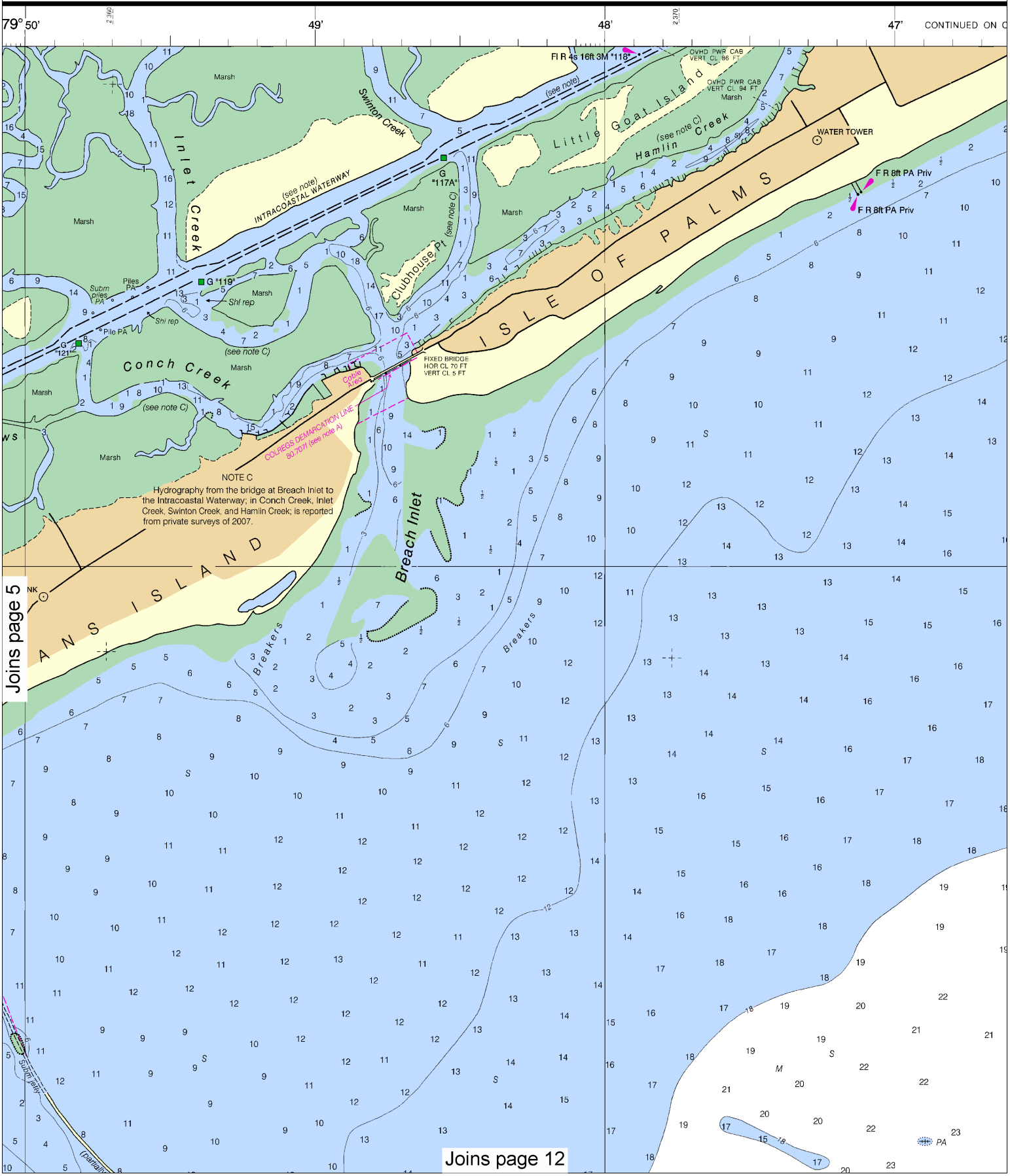
Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500

Note: Chart grid lines are aligned with true north.



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:26667. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



Joins page 5

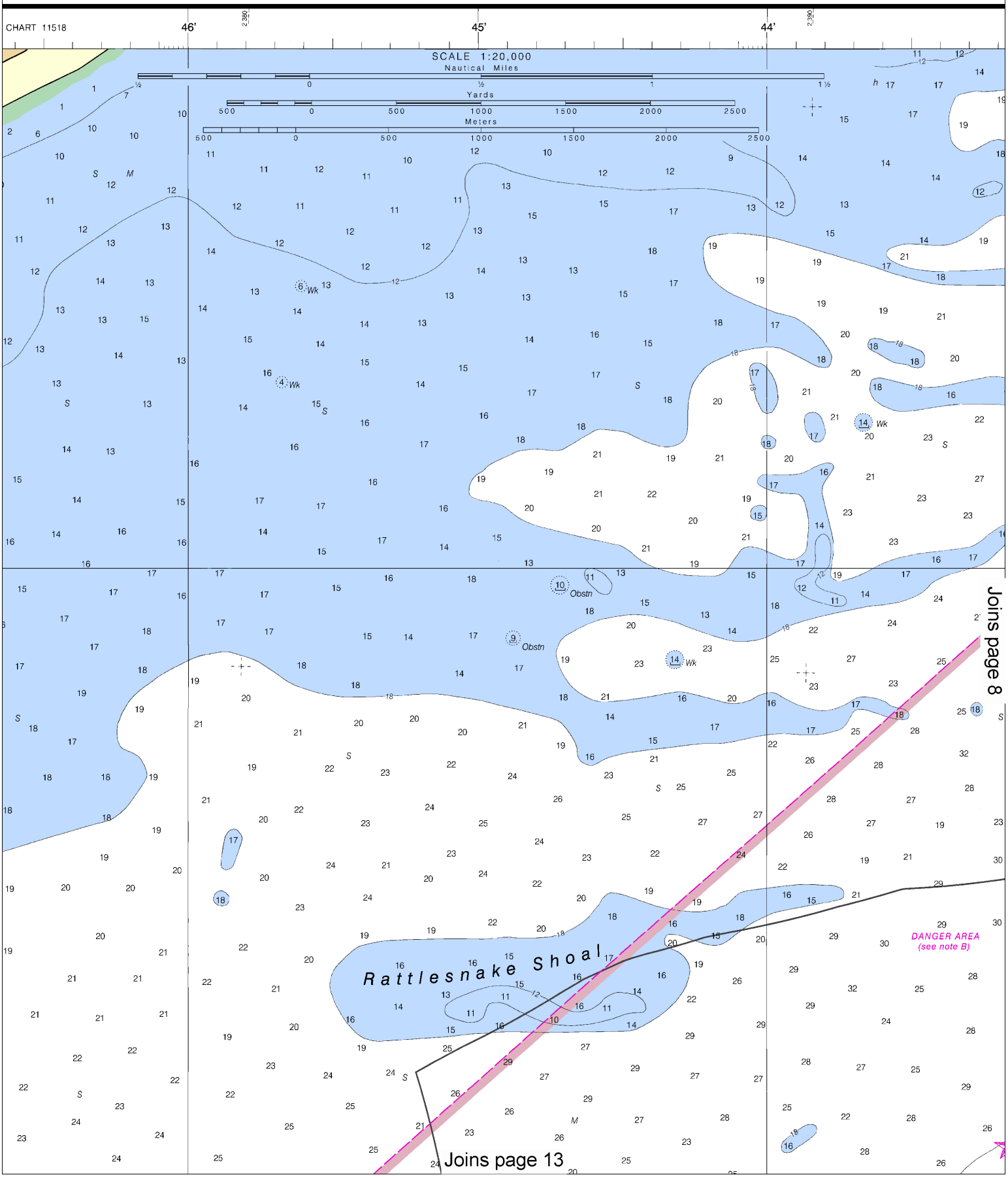
Joins page 12

Note: Chart grid lines are aligned with true north.

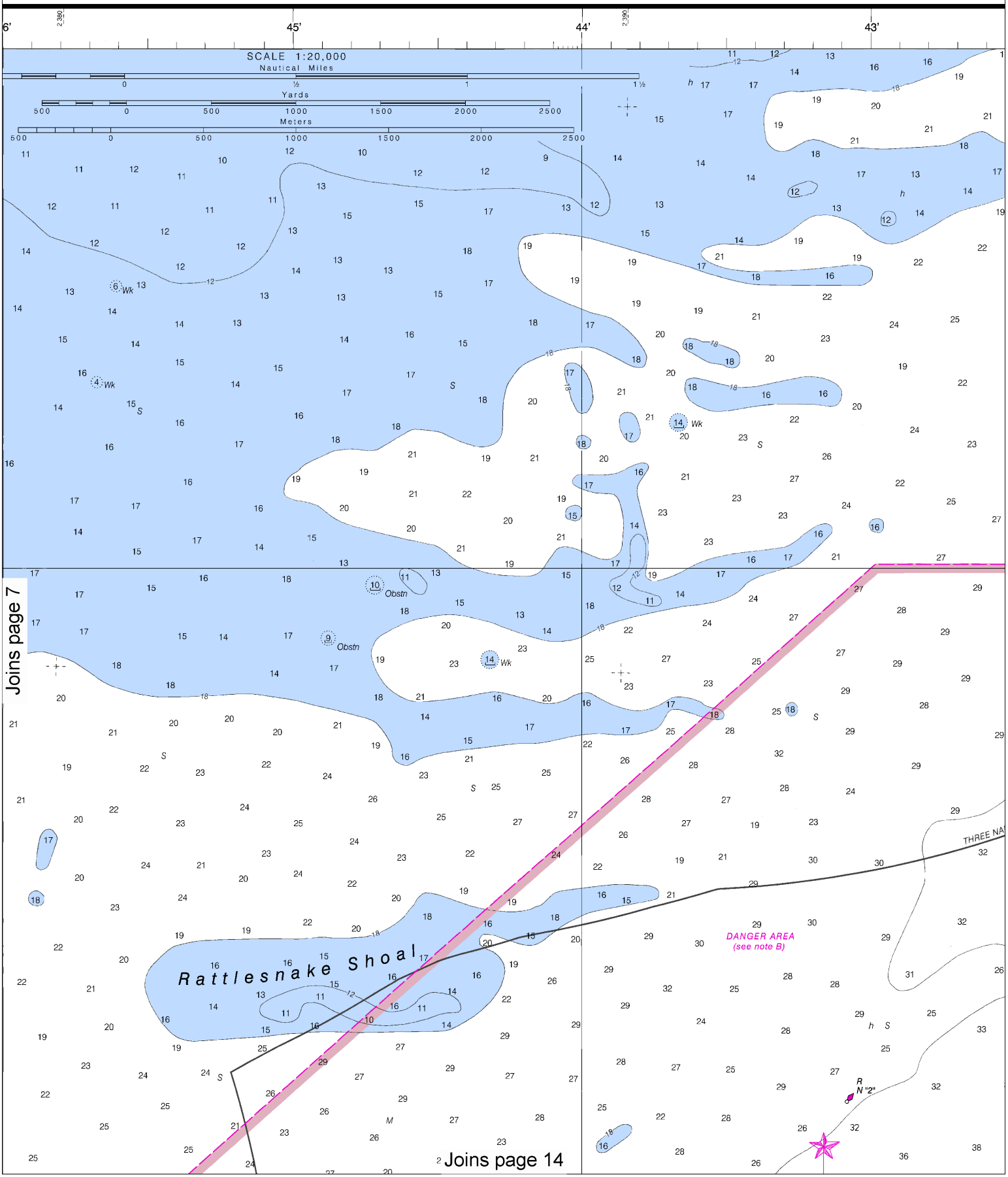
Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles
0 1 1½

Yards
500 0 500 1000 1500 2000 2500



This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 0313 1/15/2013,
NGA Weekly Notice to Mariners: 0413 1/26/2013,
Canadian Coast Guard Notice to Mariners: n/a.



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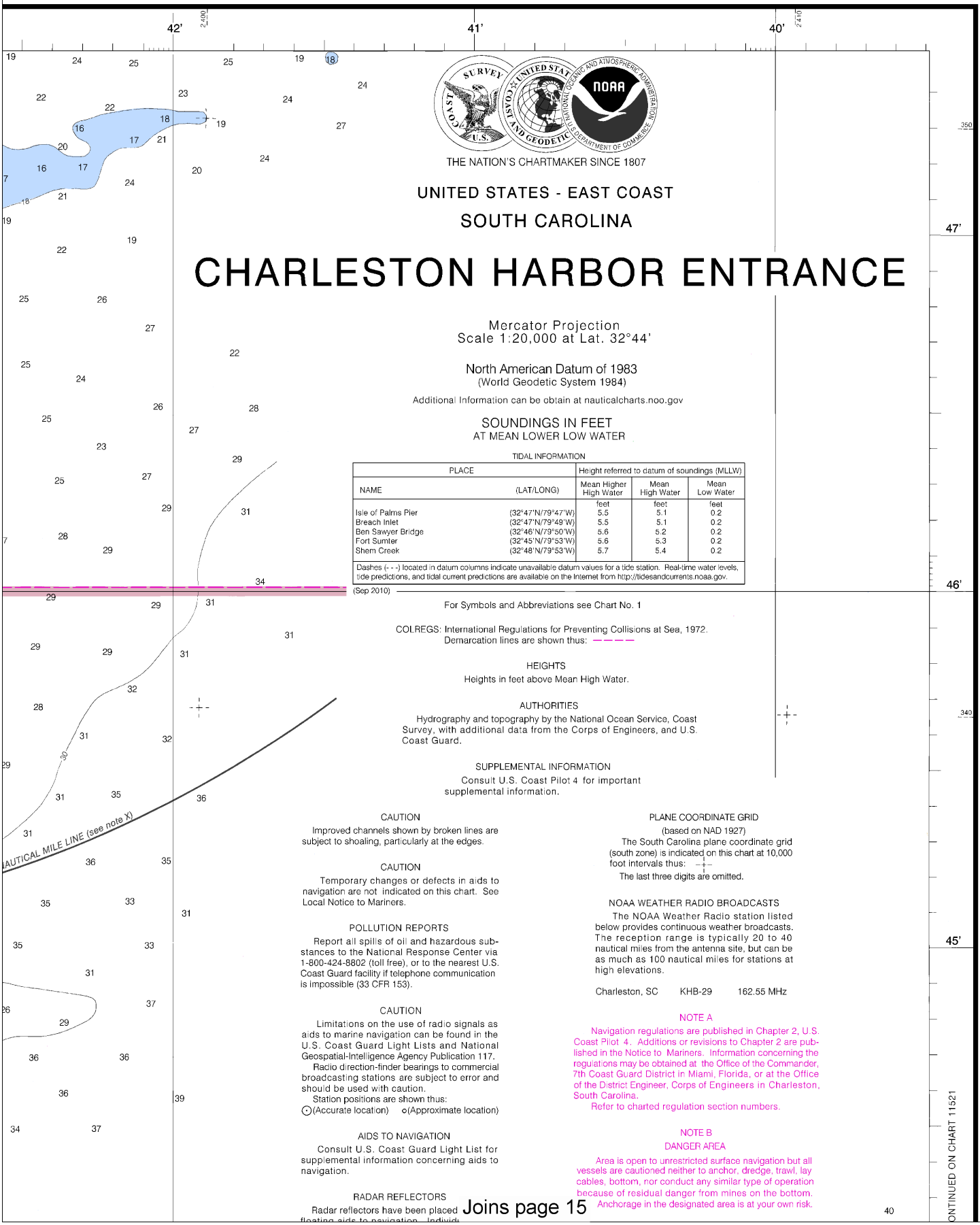
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles

Yards



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST

SOUTH CAROLINA

CHARLESTON HARBOR ENTRANCE

Mercator Projection
Scale 1:20,000 at Lat. 32°44'

North American Datum of 1983
(World Geodetic System 1984)

Additional Information can be obtain at nauticalcharts.noo.gov

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Isle of Palms Pier	(32°47'N/79°47'W)	5.5	5.1	0.2
Breach Inlet	(32°47'N/79°49'W)	5.5	5.1	0.2
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Fort Sumter	(32°45'N/79°53'W)	5.6	5.3	0.2
Shem Creek	(32°48'N/79°53'W)	5.7	5.4	0.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Sep 2010)

For Symbols and Abbreviations see Chart No. 1

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: ————

HEIGHTS
Heights in feet above Mean High Water.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 4 for important supplemental information.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

RADAR REFLECTORS
Radar reflectors have been placed floating aids to navigation. Individ

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PLANE COORDINATE GRID
(based on NAD 1927)
The South Carolina plane coordinate grid (south zone) is indicated on this chart at 10,000 foot intervals thus: -+-
The last three digits are omitted.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

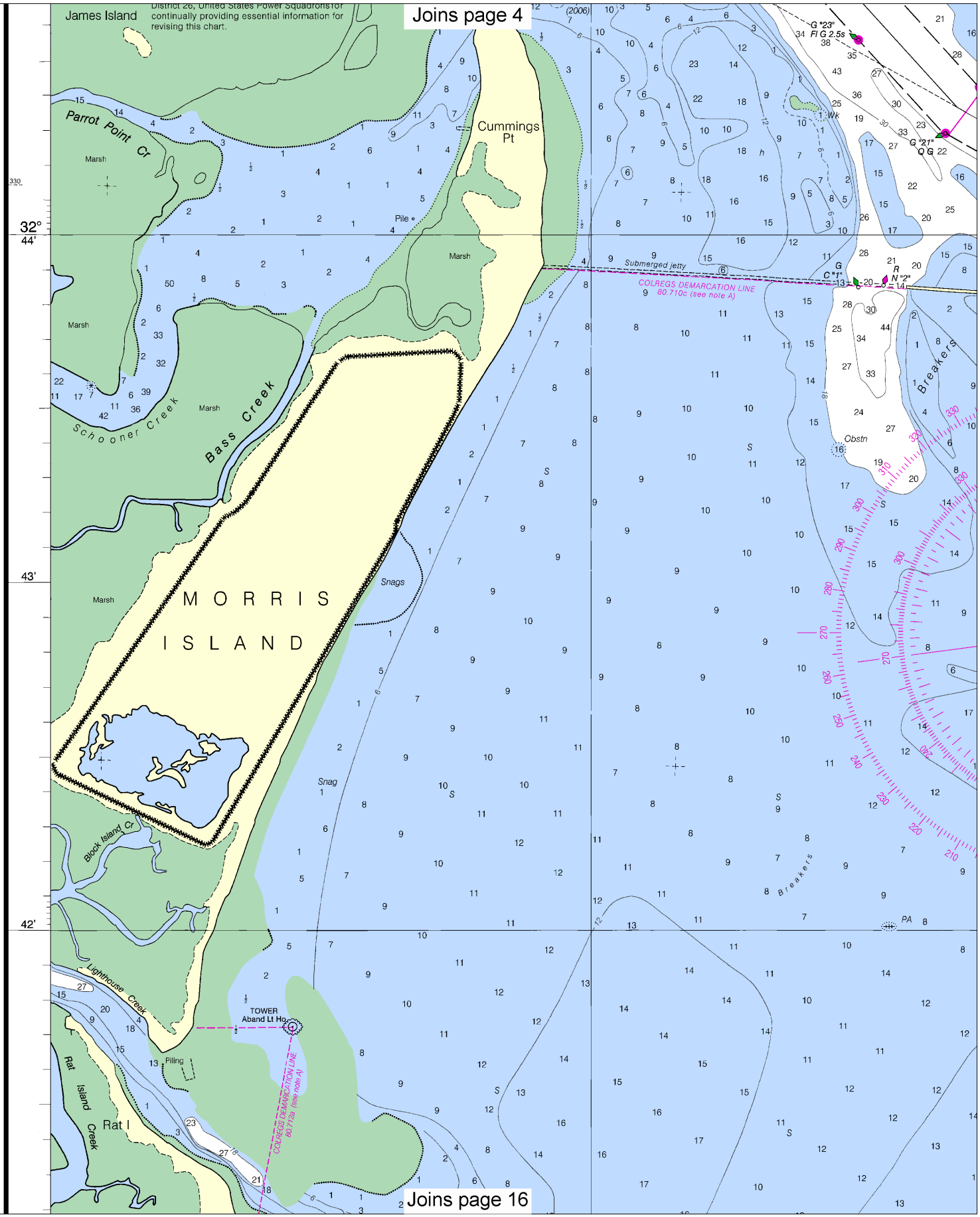
Charleston, SC KHB-29 162.55 MHz

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 4. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 7th Coast Guard District in Miami, Florida, or at the Office of the District Engineer, Corps of Engineers in Charleston, South Carolina.
Refer to charted regulation section numbers.

NOTE B
DANGER AREA
Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any similar type of operation because of residual danger from mines on the bottom. Anchorage in the designated area is at your own risk.

40

CONTINUED ON CHART 11521

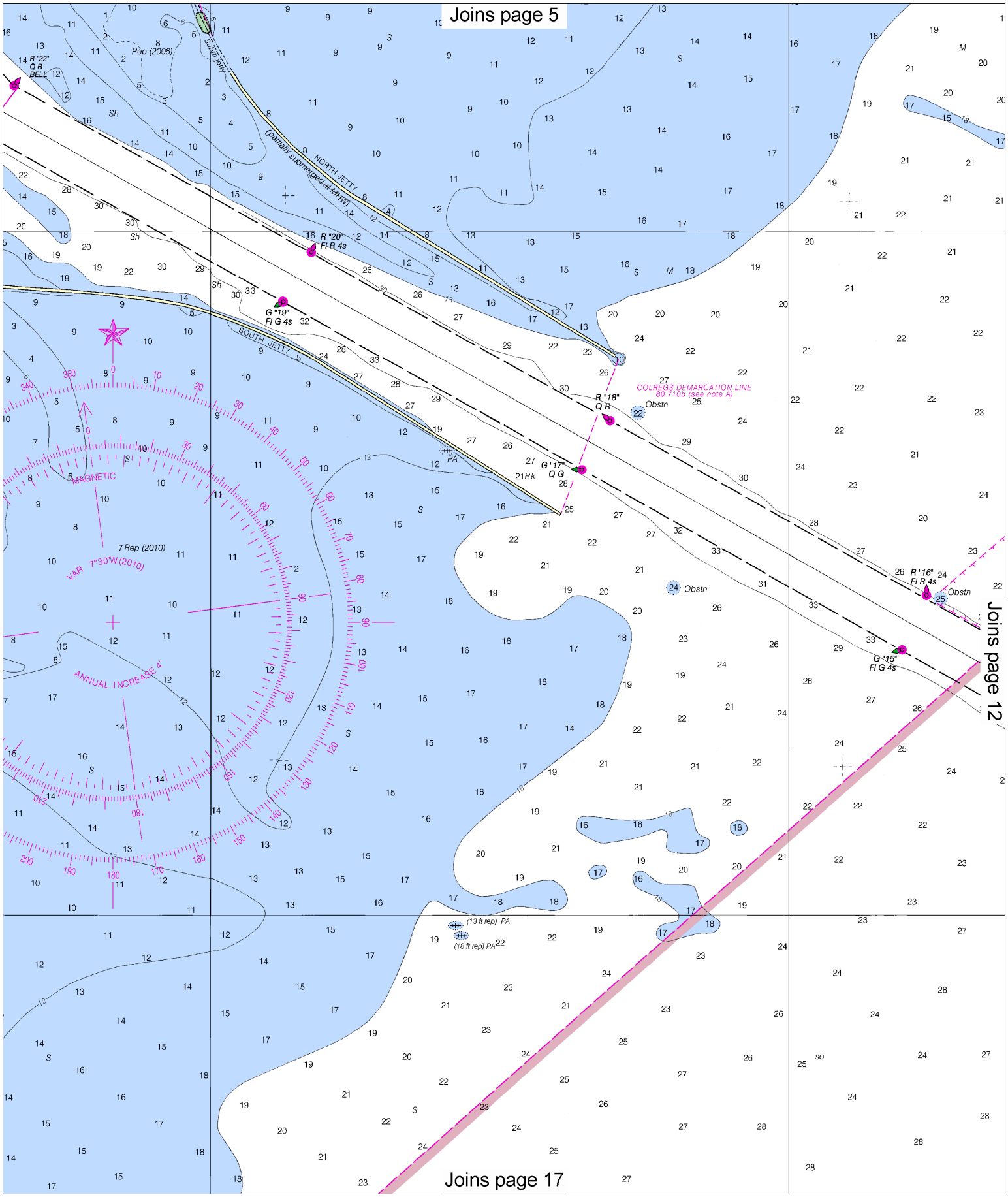


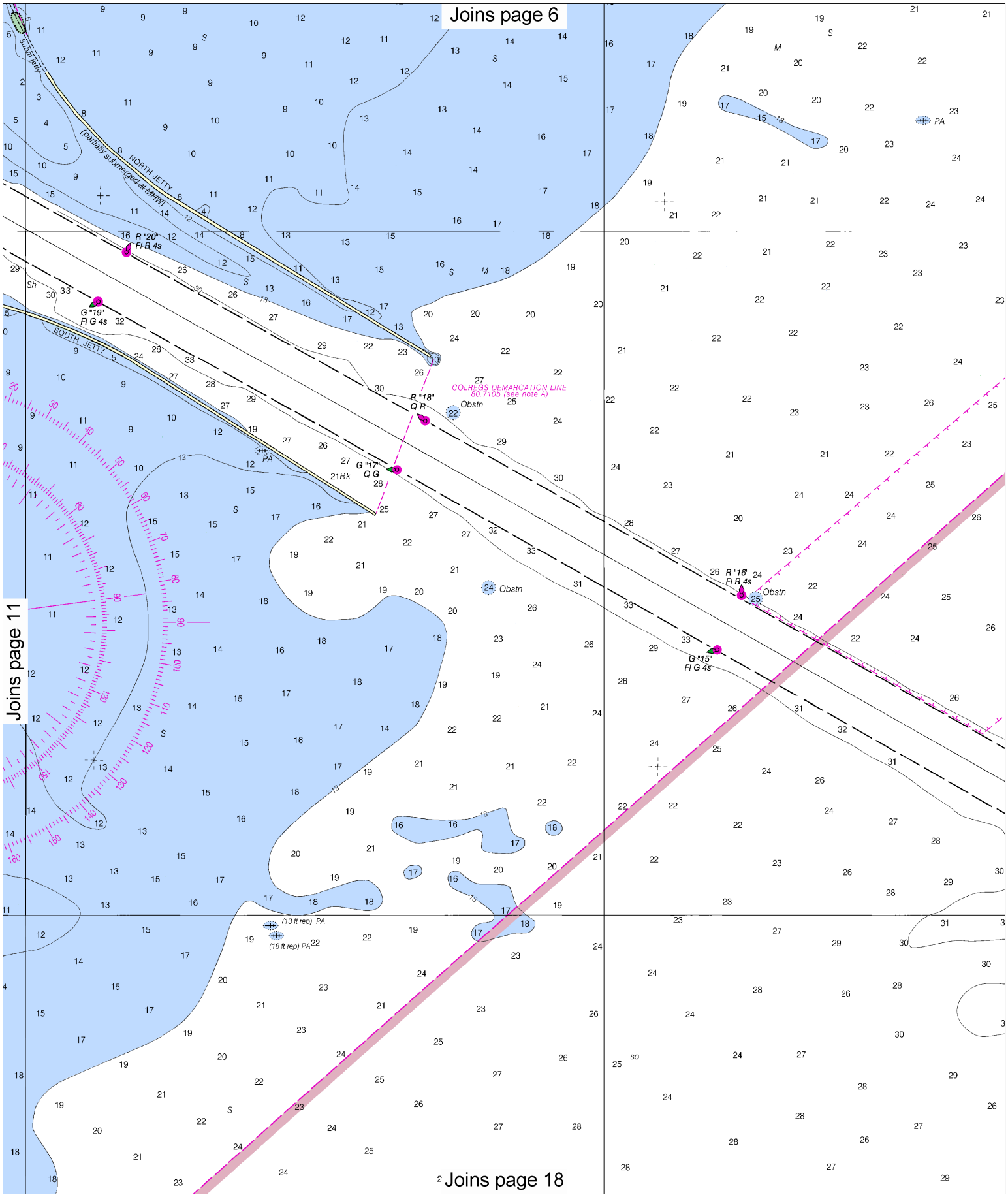
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles
0 1 1½

Yards
500 0 500 1000 1500 2000 2500


Joins page 5
Joins page 12
Joins page 17
NORTH JETTY
(partially submerged at MHHW)
SOUTH JETTY
R "20"
Fl R 4s
G "19"
Fl G 4s
R "18"
Q R
G "17"
Q G
21Rk
COLREGS DEMARCATION LINE
80.710b (see note A)
Obstn
R "16"
Fl R 4s
G "15"
Fl G 4s
PA
(13 ft rep) PA
(18 ft rep) PA
MAGNETIC
VAR 7°30'W (2010)
ANNUAL INCREASE 4'
7 Rep (2010)
Rep (2006)
R "22"
Q R
BELL

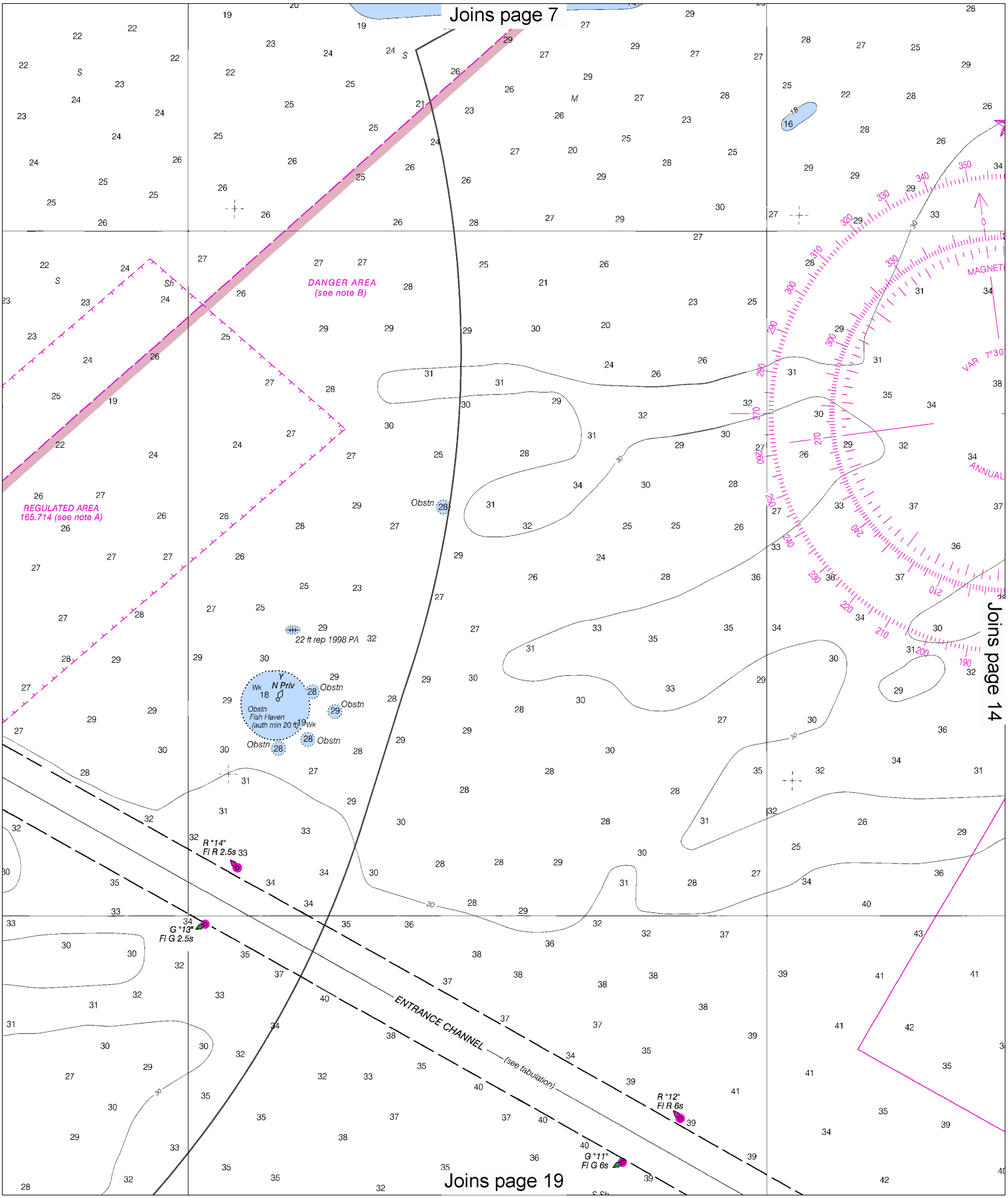


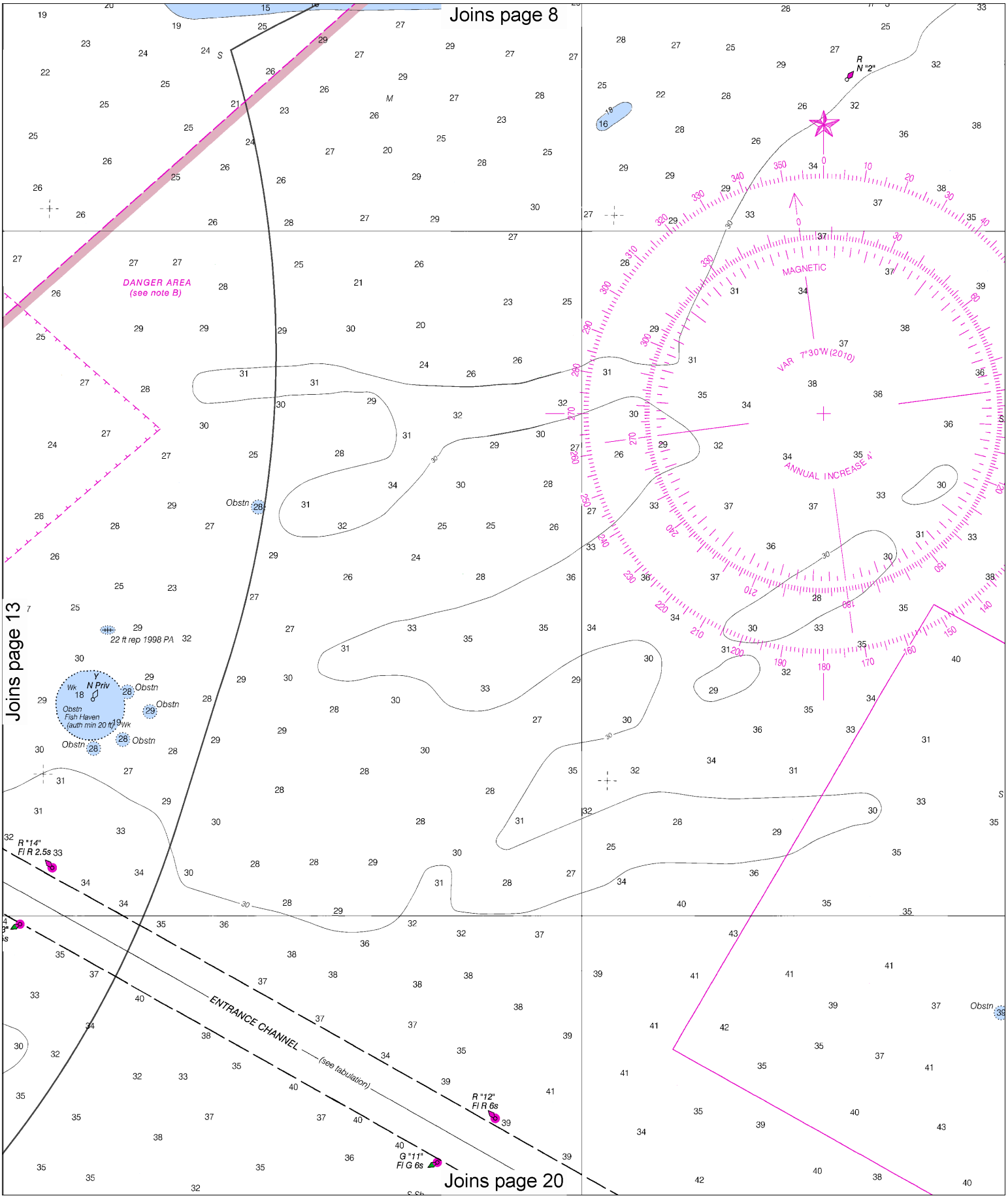
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0, 1, 1 ½

Yards: 500, 0, 500, 1000, 1500, 2000, 2500


Joins page 7
DANGER AREA
(see note B)
REGULATED AREA
165.714 (see note A)
Obstn
22 ft rep 1998 PA
N Priv
Obstn
Fish Haven
(auth min 20 ft)
Wk
R "14"
Fl R 2.5s
G "13"
Fl G 2.5s
ENTRANCE CHANNEL
(see tabulation)
R "12"
Fl R 6s
G "11"
Fl G 6s
Joins page 19
Joins page 14
MAGNETI
VAR 7°30
ANNUAL



14

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles
0 1 1½

Yards
500 0 500 1000 1500 2000 2500

broadcasting stations are subject to should be used with caution.

Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

Joins page 9

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.634" northward and 0.690" eastward to agree with this chart.

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

Coast Guard District in Miami, Florida, or at the Office e District Engineer, Corps of Engineers in Charleston, South Carolina.

Refer to charted regulation section numbers.

NOTE B

DANGER AREA

Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any similar type of operation because of residual danger from mines on the bottom.

Anchorage in the designated area is at your own risk.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

WARNING

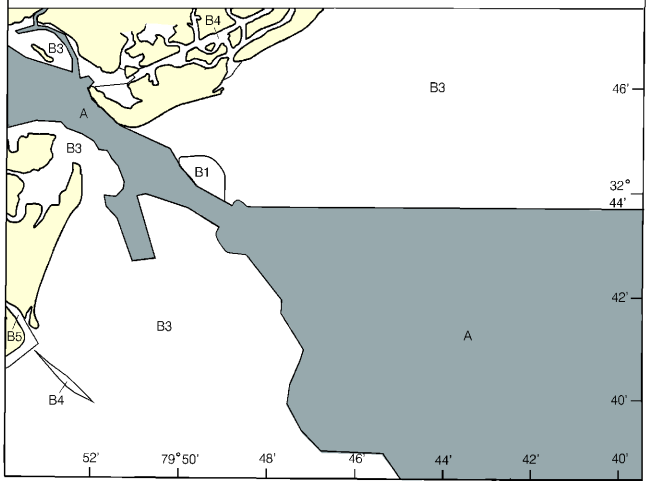
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

SOURCE

A 1990 - 2008	NOS Surveys	full bottom coverage
B1 1990 - 1998	NOS Surveys	partial bottom coverage
B3 1940 - 1969	NOS Surveys	partial bottom coverage
B4 1900 - 1939	NOS Surveys	partial bottom coverage
B5 Pre - 1900	NOS Surveys	partial bottom coverage



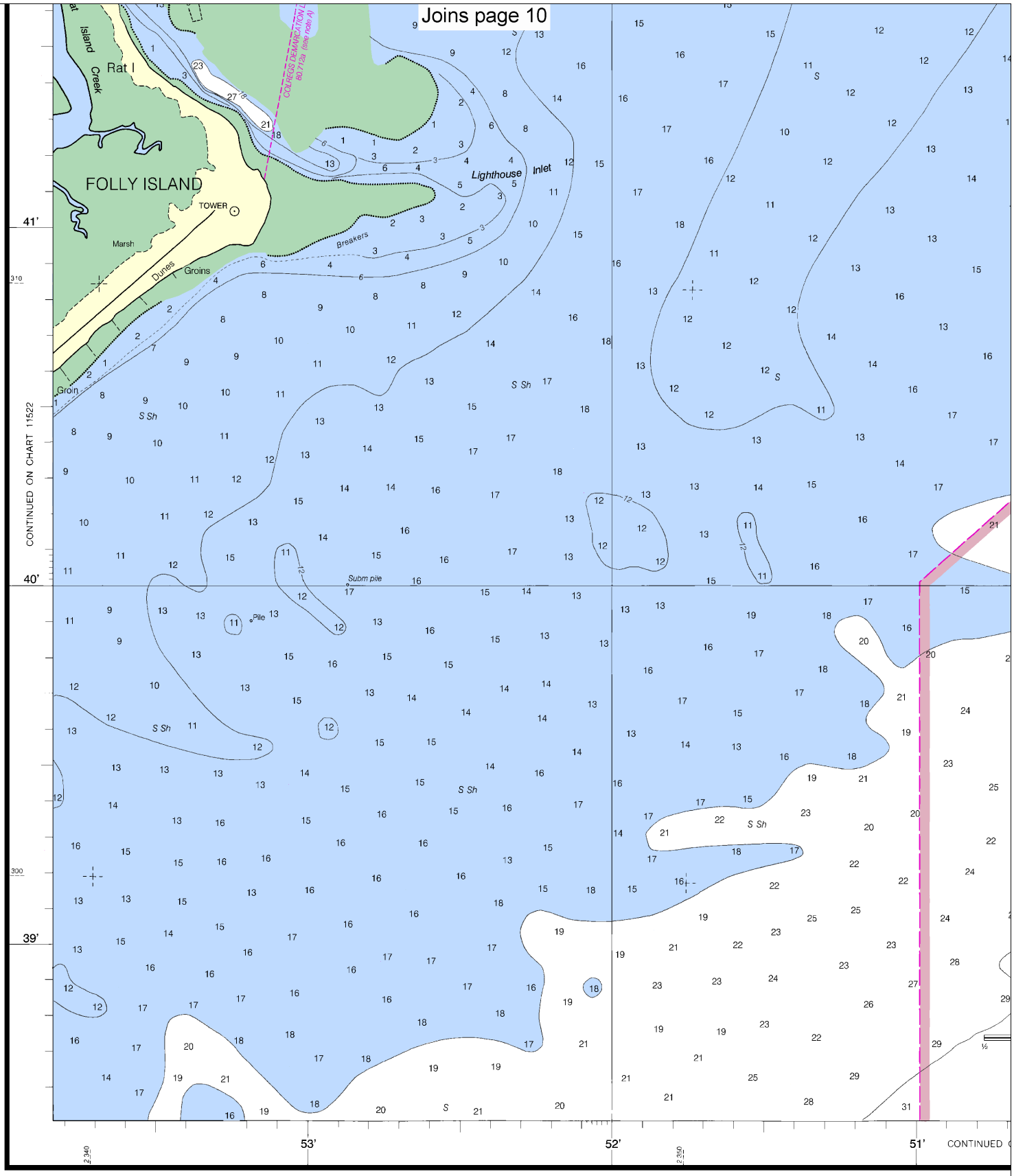
SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

ANCHORAGE AREA (anchor at your own risk) (see note B)

Joins page 21

CONTINUED ON CHART 11521



25th Ed., Oct. /10 ■ Corrected through NM Oct. 23/10
Corrected through LNM Oct. 12/10

11523

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

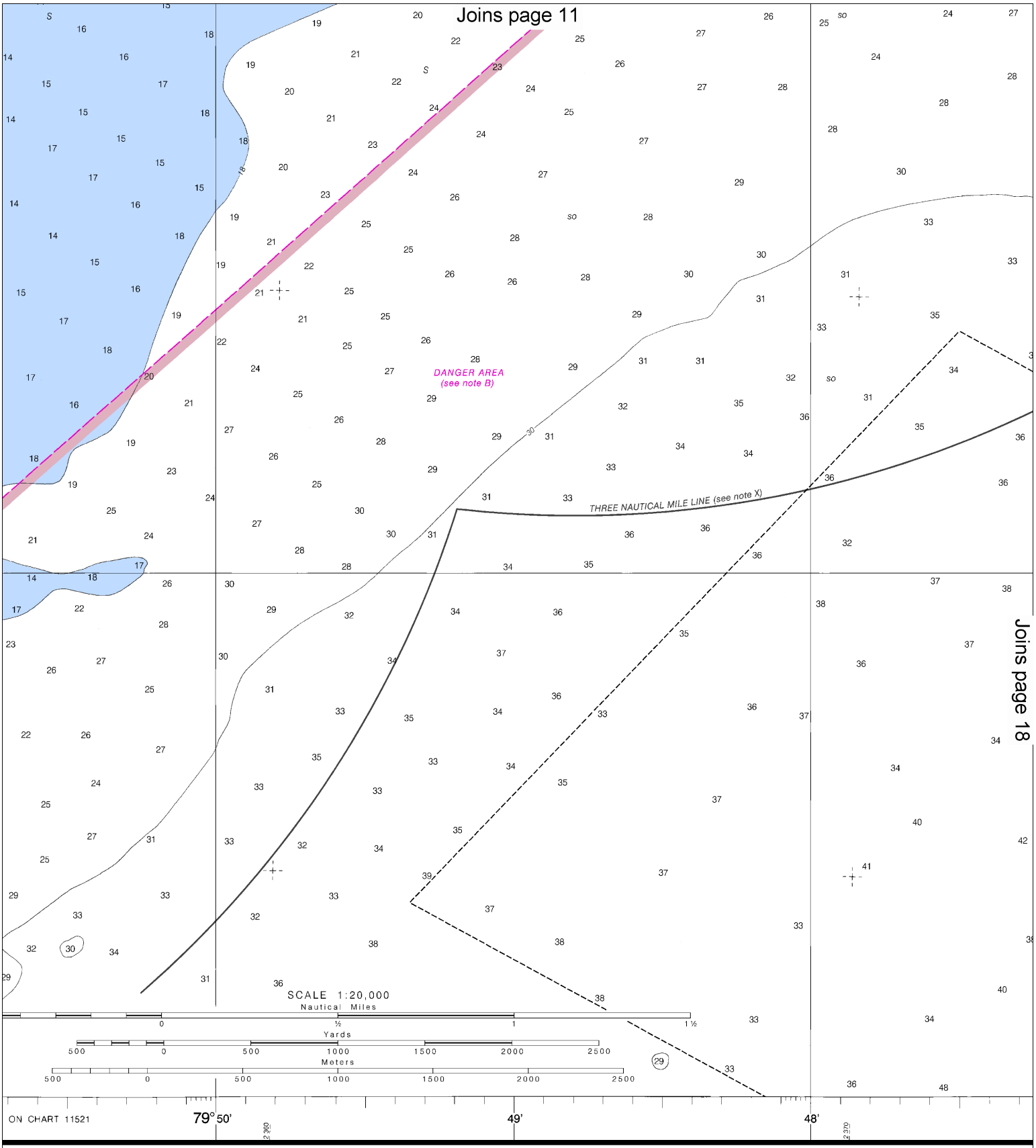
This nautical chart has been designed to promote safe naviga
Ocean Service encourages users to submit corrections, additions
improving this chart to the Chief, Marine Chart Division (N/CS2)
Service, NOAA, Silver Spring, Maryland 20910-3282.

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500



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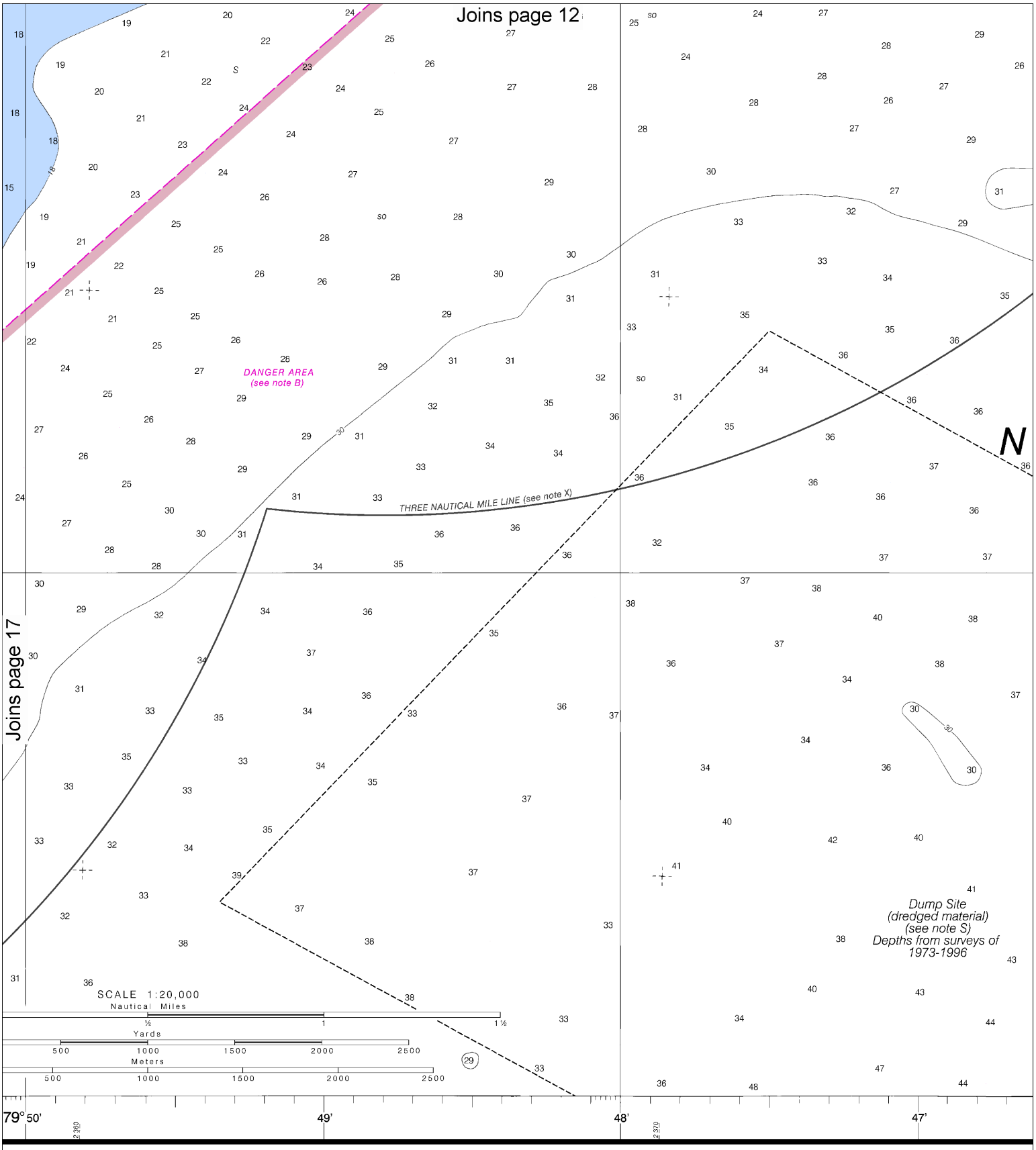
LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.



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Note: Chart grid lines are aligned with true north.

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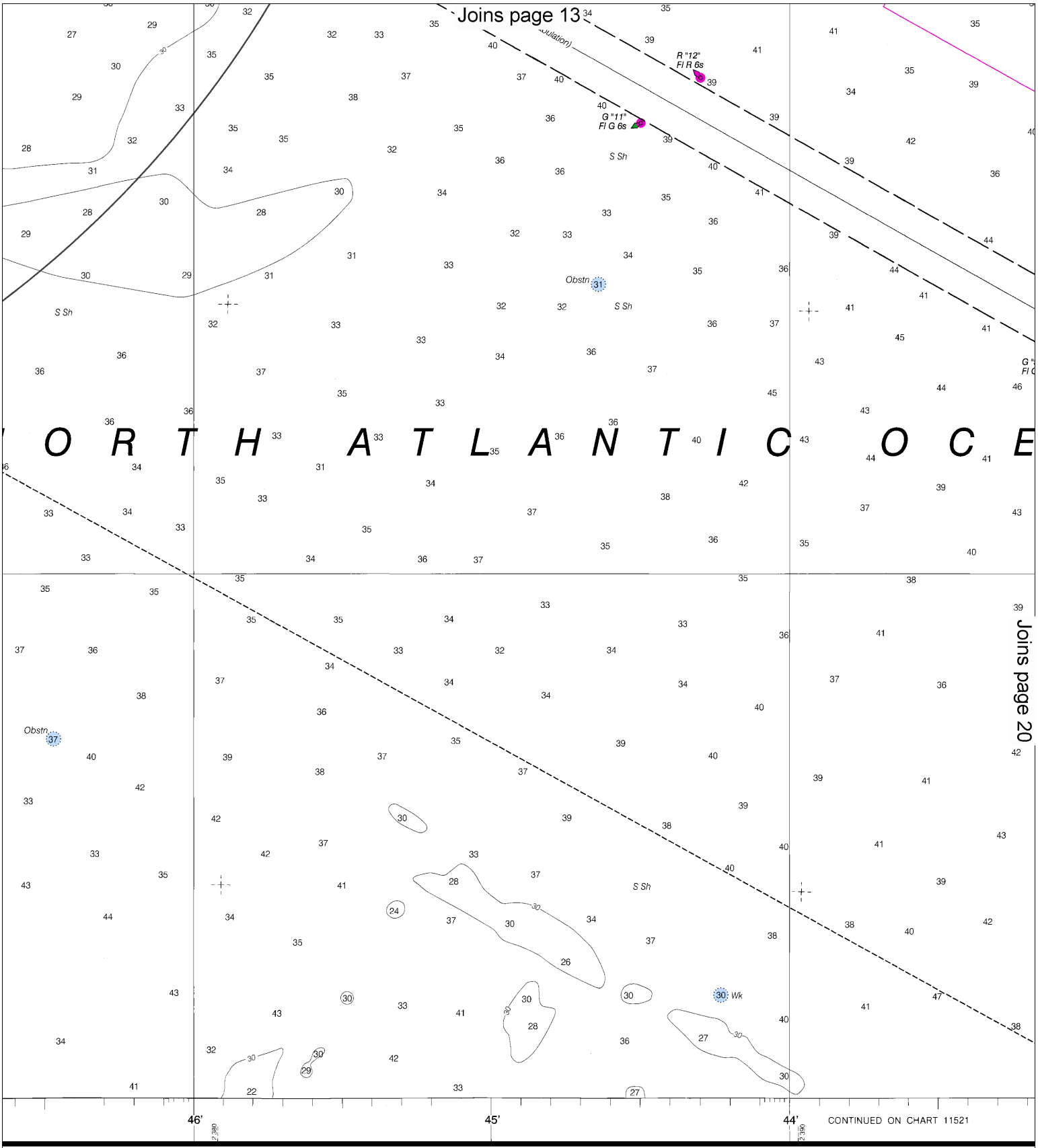
Nautical Miles
0 1 1 ½

Yards
500 0 500 1000 1500 2000 2500



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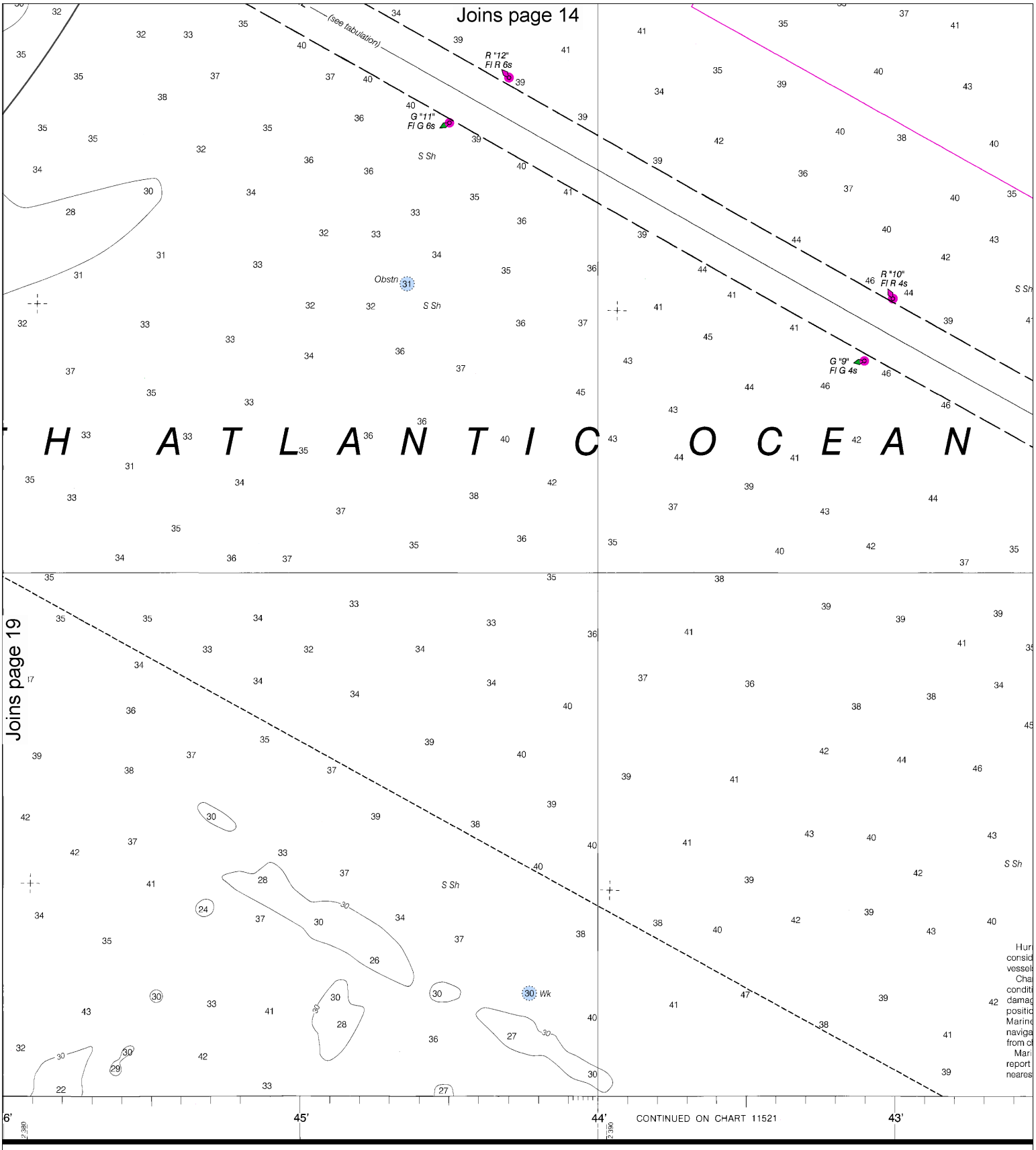
SOUNDINGS IN



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SOUNDINGS IN FEET

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FEET
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Note: Chart grid lines are aligned with true north.

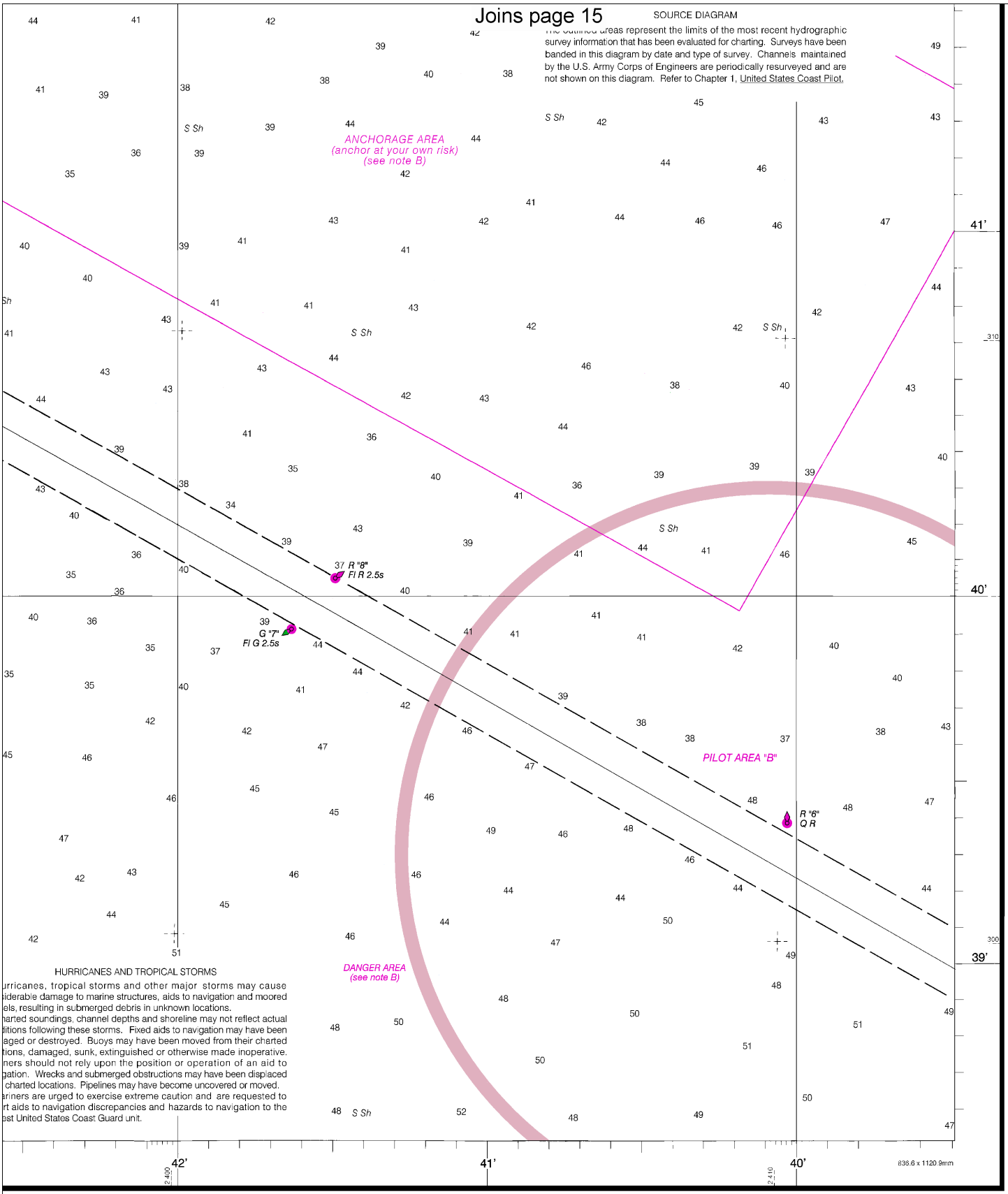
Printed at reduced scale. ~~SCALE 1:20,000~~

See Note on page 5.

Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500

Joins page 15



ED. NO. 25
NSN 7642014010160
NGA REFERENCE NO. 11AHA11523

Charleston Harbor Entrance

SOUNDINGS IN FEET - SCALE 1:20,000

11523

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

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Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
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National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

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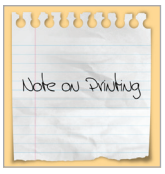

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